Important Advances in Clinical Medicine

Epitomes of Progress — General Surgery

The Scientific Board of the California Medical Association presents the following inventory of items of progress in general surgery. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in general surgery which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on General Surgery of the California Medical Association and the summaries were prepared under its direction.

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Portal Hypertension

THE DIAGNOSIS of hemorrhage from esophageal varices can only be made with certainty after other sites of hemorrhage have been excluded by endoscopy. Alcoholic patients have an increased incidence of gastritis, duodenal ulcer and Mallory-Weiss tear of the esophagus. Indeed, up to 30 percent of patients with documented esophageal varices who present with upper gastrointestinal hemorrhage are bleeding from a site other than their varices. Endoscopy frequently establishes varices as the origin of hemorrhage. If esophageal varices are present but not bleeding, they are nevertheless assumed to be the source of hemorrhage if other bleeding sites are excluded by endoscopic examination.

Although some enthusiasm persists for emergency portacaval shunts within eight hours of admission, most American surgeons attempt nonoperative arrest of hemorrhage by intravenous administration of vasopressin (Pitressin) or balloon tamponade (or both), interventions that control variceal hemorrhage in 80 percent to 90 percent of patients and make it possible for elective operation to follow. If forced to carry out an emergency shunt, we prefer the end-to-side portacaval shunt, although the mesocaval interposition shunt is favored by many. Because substantiation of the claims of technical simplicity or maintenance of hepatopedal flow with the mesocaval shunt are unproved, the high thrombosis rate of the mesocaval shunt makes it a second choice to the end-to-side portacaval shunt.

For elective shunts, the Warren distal splenorenal shunt is preferred over conventional portasystemic shunts, because of its lower incidence of postoperative encephalopathy. Moreover, with the Warren shunt, unlike conventional shunts, prolongation of life (in nonalcoholic cirrhotic patients and perhaps in alcoholic patients who stop drinking) has been reported. The Warren shunt is too technically challenging for emergency situations. The presence of significant ascites is a contraindication to a Warren shunt, and for patients with poorly controlled ascites, a side-to-side variety of shunt is preferred.

Two recently described techniques for direct control of the bleeding from esophageal varices are the extensive gastroesophageal devascularization of Sugiura (of Japan) and simple esophageal transection with a stapler. Although the role of these procedures is as yet unclear, the Sugiura procedure has failed to be as useful in American cirrhotic patients as expected. It is likely that esophageal transection procedures will be associated with a high rebleeding rate.

A common clinical dilemma occurs in patients with poor liver function (Child's C classification), who continue to bleed from varices in spite of